AMERICAN MUSEUM NOVITATES

Number 626 — Published by THE AMERICAN MUSEUM OF NATURAL HISTORY New York City — May 25, 1933

59.7, 55 A (66.6)

A NEW CATFISH, *AMPHILIUS PICTUS*, AND A DISCUSSION OF A SMALL LIBERIAN COLLECTION OF FISHES

BY J. T. NICHOLS AND F. R. LAMONTE

In a small but interesting collection of fishes from Liberia, West Africa, courteously presented to The American Museum of Natural History by Dr. G. W. Harley, we find the following pretty little catfish, which appears to be undescribed.

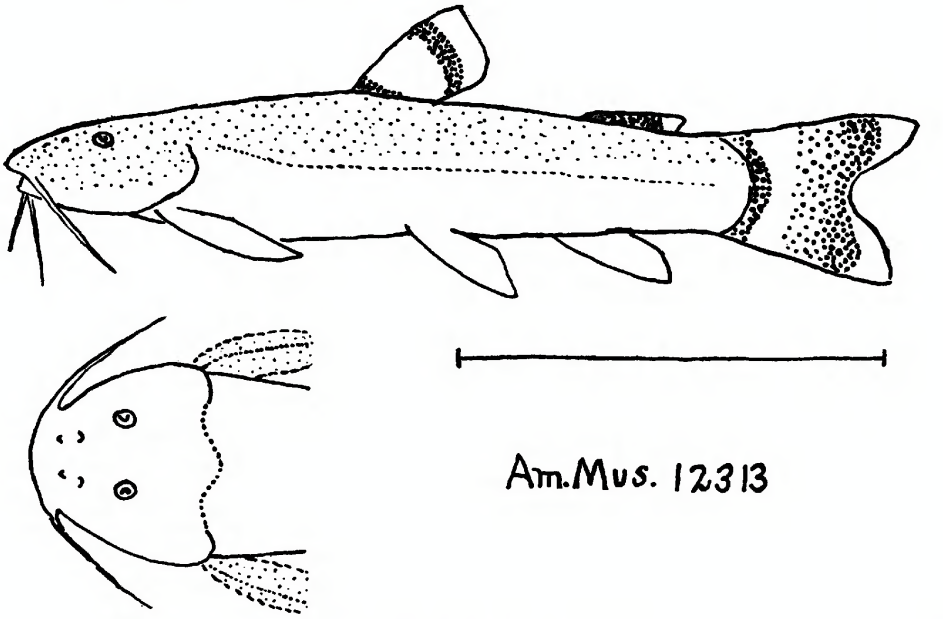

Fig. 1. *Amphilius pictus*, type.

Amphilius pictus, new species

SPECIFIC CHARACTERS.—Ventral origin slightly behind middle of dorsal base. Head only slightly longer than broad; snout broadly rounded; interocular width about 2.5 times diameter of eye. Caudal peduncle a little longer than deep. Caudal shallowly forked, with rounded lobes. Maxillary barbel shorter than head. Length of the adipose less than its distance from the dorsal.

DESCRIPTION OF TYPE.—No. 12313, American Museum of Natural History; collected from a stream near Kaleata, Liberia; February, 1932; by Dr. G. W. Harley.

Length to base of caudal, 44 mm., depth in this length, 5; head to end of occipital process, 3.9. Eye in head, 9; snout, 2.1; interorbital, 3; width of mouth, 2; maxillary barbel, 1.4; width of head, 1.1; depth of peduncle, 2; its length, 1.7; base of dorsal, 2; length of adipose, 1.8; interspace between dorsal and adipose, 1.3; height of dorsal, 1.4; of anal, 1.8; length of pectoral, 1.2; of ventral, 1.6; caudal, 1.1.

Dorsal rays, 7 (6 branched); anal, 8 (6 branched); Gill-rakers, 7 on lower limb of first arch.

Head depressed; peduncle compressed; interorbital almost flat; eyes superior, without free rim; lower jaw distinctly included; maxillary barbel not quite reaching posterior angle of gill-cover. Origin of dorsal about equidistant between end of snout and tip of depressed anal.

Body color irregularly dull olive, without distinct markings; belly before the ventrals white. Dorsal dusky at base in front and with a broad blackish cross-band above the middle; middle of adipose more or less dusky; caudal with a blackish bar at its base and a broad blackish subterminal cross-band leaving the tips of the lobes pale; lower fins pale, essentially unmarked.

There are five other specimens with the same data, which range from 32–45 mm. in standard length.

The material received, all from near Kaleata, Liberia, comprises the following:

5 *Marcusenius brachistius* Gill
12 *Isichthys henryi* Gill
2 *Alestes longipinnis* (Günther)
2 *Clarias salae* Hubrecht
1 *Clarias liberiensis* Steindachner
6 *Amphilius pictus* Nichols and LaMonte
4 *Hemichromis fasciatus* Peters
8 *Hemichromis bimaculatus* Gill
5 *Pelmatochromis humilis* Boulenger
15 *Haplochilus fasciolatus* Günther

This small collection, our first of fresh-water fishes from Liberia, though too small to be in any sense conclusive, may yet be analyzed as evidence bearing on the relationships of the fresh-water fish-fauna it represents.[1-2]

It is made up of some 60 specimens (10 species) as follows: mormyrids, 17 (2 species); characins, 2 (1); catfish, 9 (3); cichlids, 17 (3); cyprinodonts, 15 (1).

The locality lies within the general Nile-West African faunal area, where mormyrids, characins, and catfish have been found to be dominant. The proportion of catfish therein contained is comparable to that in the Nile and Congo,[2] and is higher than in a collection from across the southern border of the faunal area in Angola.[1] In the Congo, mormyrids and

[1]Nichols and Boulton, 1927, Amer. Mus. Novitates, No. 264, pp. 1–2.
[2]Nichols, 1928, Amer. Mus. Novitates, No. 319, pp. 3–7.

characins were found to be about equally balanced, each 18 per cent by species. Across in Angola, the mormyrids still held at 16⅔ per cent, but characins were only 8⅓ per cent; whereas in the Nile collection mormyrids were down to about 12 per cent, characins up to 30 per cent; and in the present small Liberian collection characins are 10 per cent and 2 mormyrids 20 per cent (2 specimens of the former versus 17 of the latter). It may be that the small proportion of characins in the Liberian and Angolan collections is correlated with an ecological factor,—small streams.

In any event, there is thus far nothing to make of Liberia more an outlying part of the general Nile-West African faunal area, than of Angola. However, let us consider the genus *Barbus*: 3 or 4 per cent in Congo and Nile collections; 41⅔ per cent in that from Angola; none in the Liberian collection. Also, the lack of representation of this genus can hardly be assigned to ecological conditions, for (though it is generally poorly represented in the forested West African area) small streams are as a rule favorable for it. The considerable representation of cichlids, 30 per cent (17 specimens confirming the significance of 3 species), is interesting, as compared with only 9 per cent Congo and Nile and 20⅚ per cent Angola; also of interest is the presence in the Liberian collection of cyprinodonts (15 individuals of 1 species), 10 per cent, these being a very minor factor elsewhere. From this, one might get the impression that cichlids have been shouldered aside from the heart of the present strong Nile-Congo fauna, and that there is correlation between abundance of cyprinodonts and a territory that is remote from the point of entrance of the recent *Barbus* invasion of Africa. On other grounds it seems more likely that these two "peripheral" groups infiltrated an established "continental" catfish-characin fauna, than that they were present before Africa's invasion by such, but at least there is the implication that they have been long present and are not a recent invasion as the genus *Barbus* seems to be.